Part 3: Major or Minor Source

Once you have calculated your facility's potential to emit (PTE) you can determine whether you are a "major" or "minor" source of air pollution. This is important because major sources are subject to more regulations than minor sources. Compare your facility's PTE to the thresholds listed in Table 3-1 below:

Table 3-1: Major Source Thresholds

Type of Pollutant	Major Source Threshold
Particulate Matter (PM)	100 tons/year
Volatile Organic Compounds (VOCs)	100 tons/year
Carbon Monoxide (CO)	100 tons/year
Nitrogen Oxides (NOx)	100 tons/year
Sulfur Dioxide (SO_2)	100 tons/year
Lead (Pb)	10 tons/year
Hazardous Air Pollutants (HAPs) • Any single HAP • Any combination of HAPs	 10 tons/year 25 tons/year
Any other regulated air contaminant	100 tons/year

If your facility's PTE is <u>below</u> all the emission thresholds in Table 3-1, you are considered to be a true minor source not subject to the Renewable Operating Permit Program or any of the other major source requirements. You should keep records showing your calculations and all assumptions. Be sure to recalculate your PTE whenever new processes are added or changes are made that may increase your PTE.

If your facility's PTE <u>exceeds</u> any of the thresholds in Table 3-1, you are considered a major source, and you have two options:

1. Comply with the major source requirements discussed on the following page.

   or

2. Limit your PTE using one of the mechanisms described in Part 4 to avoid being a major source. Smaller companies that have <u>actual</u> emissions well below the major source thresholds should consider this option.

SB Inc. Small Business, Inc.'s PTE calculations in Part 2 of this workbook indicate that they exceed the major source threshold for VOC, individual HAPs (Xylene, Toluene, and MEK), and total HAPs (see pages 2-33 and 2-34). However, Small Business Inc.'s <u>actual</u> emission are well below any of the major source thresholds. It would be a good idea for this company to limit their PTE rather than apply for a Renewable Operating Permit and become subject to other major source requirements. Part 4 discusses how Small Business Inc. will limit their PTE.

MAJOR SOURCE REQUIREMENTS

If your facility is considered a major source, you may be subject to any of the following requirements.

☐ **Renewable Operating Permit (ROP) Program**
All major sources of air pollution are subject to the ROP Program. You must apply for an ROP within 12 months of becoming a major source. To apply for an ROP you will need to use special software developed by the Michigan Department of Environmental Quality (DEQ) called PASS-ROP (Permit Application Submittal System for Renewable Operating Permits). This software can be obtained from your DEQ, Air Quality Division (AQD) district office (see Appendix E).

The ROP must be renewed every five years. In addition, sources subject to the ROP Program must submit annual and semi-annual certification reports as well as report any deviations from permit conditions that occur throughout the year.

You can find more information about the ROP Program on the Internet at **www.michigan.gov/deqair** (select "Clean Air Assistance" then "Renewable Operating Permit Program") or by contacting the Clean Air Assistance Program at (800) 662-9278.

☐ **MAERS Reporting**
All major sources and sources that opt-out of the ROP Program are subject to the Michigan Air Emissions Reporting System (MAERS). Under this system, major sources must submit a MAERS report to the AQD annually. Subject facilities will receive a MAERS packet in the mail every January that will outline their reporting requirements. Additional information about MAERS can be found on the Internet at **www.michigan.gov/deqair** (select "Emissions" then "Emissions Reporting").

☐ **Annual Air Emissions Fees**
Major sources are subject to annual emissions fees. The fee amount is assessed based upon the emissions reported in MAERS. A fee invoice is mailed to the subject facility in January and the payment is due within 90 days. More information about annual air emissions fees can be found on the Internet at **www.michigan.gov/deqair** (select "Emissions" then "Annual Emission Fees").

☐ **National Emission Standards for Hazardous Air Pollutants NESHAPs (also known as MACT Standards)**
Certain industrial categories that exceed the major source thresholds for HAPs may be subject to a federal NESHAP. The NESHAP will usually be incorporated into a facility's ROP. A listing of the source categories that may be subject to a NESHAP are provided in Table 3-2. You can learn more about a particular NESHAP on the Internet at **www.epa.gov/ttn/atw/mactfnlalph.html**.

Table 3-2: NESHAP - Source Categories Affected

- Aerospace Industry
- Asbestos
- Asphalt Roofing & Processing
  - Asphalt Processing
  - Asphalt Roofing
- Auto & Light Duty Truck (surface coating)
- Benzene Waste Operations*
- Boat Manufacturing
- Brick and Structural Clay Products Manufacturing also Clay Ceramics Manufacturing
- Cellulose Production Manufacturing
  - Caroxymethylcellulose Production
  - Cellulose Ethers Production
  - Cellulose Food Casing Manufacturing
  - Cellophane Production
  - Methylcellulose Production
  - Rayon Production
- Chromium Electroplating
  - Chromic Acid Anodizing
  - Decorative Chromium Electroplating
  - Hard Chromium Electroplating
- Coke Oven: Pushing, Quenching, & Battery Stacks
- Coke Ovens Charging, Top Side, and Door Leaks
- Combustion Turbines
- Degreasing Organic Cleaners (Halogenated Solvent Cleaning)
- Halogenated Solvent Cleaners
- Dry Cleaning
  - Commercial drycleaning dry-to-dry
  - Commercial drycleaning transfer machines
  - Industrial drycleaning dry-to-dry
  - Industrial drycleaning transfer machines
- Engine Test Cells/Stands (Combined with Rocket Testing Facilities)
- Commercial Sterilizers
  - Commercial Sterilization Facilities
- Fabric Printing, Coating & Dyeing
- Ferroalloys Production
- Flexible Polyurethane Foam Fabrication Operation
- Flexible Polyurethane Foam Production
- Friction Products Manufacturing
- Gasoline Distribution (Stage 1)
- General Provisions
- Generic MACT +
  - Acetal Resins
  - Hydrogen Fluoride
  - Polycarbonates Production
  - Acrylic/Modacrylic Fibers
- Generic MACT +
  - Carbon black production
  - Cyanide chemicals manufacturing
  - Ethylene processes
  - Spandex production
- Hazardous Waste Combustion
- Hazardous Organic NESHAP
- Hydrochloric Acid Production
  - Fumed Silica Production
- Industrial, Commercial and Institutional Boilers and Process Heaters
- Industrial Cooling Towers
- Integrated Iron & Steel
- Iron Foundries
- Large Appliance (surface coating)
- Leather Finishing Operations
- Lime Manufacturing
- Magnetic Tape
- Manufacturing Nutritional Yeast (formerly Bakers Yeast)
- Marine Vessel Loading Operations
- Mercury Cell Chlor-Alkali Plants (formerly Chlorine Production)
- Metal Coil (Surface Coating) Industry
- Metal Can (Surface Coating)
- Metal Furniture (Surface Coating)
- Mineral Wool Production
- Misc. Coating Manufacturing
- Misc. Metal Parts and Products (Surface Coating)*
  - Asphalt/Coal Tar Application to Metal Pipes
- Misc. Organic Chemical Production and Processes (MON)
  - Alkyd Resins Production
  - Ammonium Sulfate Production
  - Benzyltrimethylammonium Chloride Prod.
  - Carbonyl Sulfide Production
  - Chelating Agents Production
  - Chlorinated Paraffins Production
  - Ethyllidene Norbomene Production
  - Explosives Production
  - Hydrazine Production
  - Maleic Anhydride Copolymers Production
  - Manufacture of Paints, Coatings, & Adhesives
  - OBPA/1, 3-diisocyanate Production
  - Photographic Chemicals Production
  - Phthalate Plasticizers Production
  - Polyester Resins Production
  - Polymerized Vinylidene Chloride Production
  - Polymethyl Methacrylate Resins Production

Table 3-2: MACT STANDARD - Source Categories Affected *(continued)*

- Misc. Organic Chemical Production and Processes (MON) *(continued)*
  - Polyvinyl Acetate Emulsions Production
  - Polyvinyl Alcohol Production
  - Polyvinyl Butyral Production
  - Quaternary Ammonium Comp. Production
  - Rubber Chemicals Production
  - Symmetrical Tetrachloropyridine Production
- Municipal Solid Waste Landfills
- Natural Gas Transmission and Storage
- Off-Site Waste Recovery Operations
- Oil & Natural Gas Production
- Organic Liquids Distribution (non-gasoline)
- Paper & Other Web (Surface Coating)
- Pesticide Active Ingredient Production
  - 4-Chlror-2-Methyl Acid Production
  - 2,4 Salts & Esters Production
  - 4,6-dinitro-o-cresol Production
  - Butadiene Furfural Cotrimer
  - Captafol Production
  - Captan Production
  - Chloroneb Production
  - Chlorothalonil Production
  - Dacthal (tm) Production
  - Sodium Pentachlorophenate Production
  - Tordon (tm) Acid Production
- Petroleum Refineries
- Petroleum Refineries Catalytic Cracking, Catalytic Reforming, & Sulfur Plant Units
- Pharmaceuticals Production
- Phosphoric Acid/Phosphate Fertilizers
- Plastic Parts (Surface Coating)
- Plywood and Composite Wood Products (formerly Plywood and Particle Board Manufacturing)
- Polyether Polyols Production
- Polymers & Resins I
  - Butyl Rubber
  - Epichlorohydrin Elastomers
  - Ethylene Propylene Rubber
  - Hypalon (TM) Production
  - Neoprene Production
  - Nitrile Butadiene Rubber
  - Polybutadiene Rubber
  - Polysulfide Rubber
- Styrene-Butadiene Rubber & Latex
- Polymers & Resins III
  - Amino Resins
  - Phenolic Resins
- Polymers & Resins IV
  - Acrylonitrile-Butadiene-Styrene
  - Methyl Methacrylate-Acrylonitrile+
  - Methyl Methacrylate-Butadiene++
  - Polystrene
  - Styrene Acrylonitrile
  - Polyethylene Terephthalate
- Polyvinyl Chloride and Copolymers Production
- Portland Cement Manufacturing
- Primary Aluminum Production
- Primary Lead Smelting
- Primary Copper
- Primary Magnesium Refining
- Printing/Publishing
- Publicly Owned Treatment Works (POTW)
- Pulp & Paper (non-combust) MACT I
- Pulp & Paper (non-chem) MACT III
- Pulp and Paper (combustion sources) MACT II Kraft, Soda, and SulfitePulp & Paper Mills
- Reciprocating Internal Combustion Engines (RICE) (NESHAP/NSPS)
- Refractory Products Manufacturing
- Reinforced Plastic Composites Production
- Secondary Aluminum
- Secondary Lead Smelters
- Semiconductor Manufacturing
- Shipbuilding & Ship Repair
- Site Remediation
- Solvent Extraction for Vegetable Oil Production
- Steel Pickling-HCL Process
- Taconite Iron Ore Processing
- Tetrahydrobenzaldehyde Manufacture (Formerly Butadiene Dimers Production)
- Tire Manufacturing
- Wet Formed Fiberglass Mat Production
- Wood Building Products (surface coating)(formerly Flat Wood Paneling Products)
- Wood Furniture
- Wool Fiberglass Manufacturing